Are You Getting Your Money's Worth?

Purpose

The purpose of this series of lessons is for students to learn how to be smart consumers, utilizing everyday items purchased as they perform mathematical computations, analyze labels, data, and make quantity comparisons for pricing and value. Maintaining the validity of these transactions occurs through the activities of weights and measures.

Time*

Reading 'Are You Getting Your Money's Worth?' One 40-minute session

Comparisons at the Grocery Store – Activity 1 Homework

Shopping at the Grocery Store – Activity 2 Homework

Results of Activities 1 & 2 30 minute classroom discussion

*Time for the lessons will vary depending on how many activities you perform and how you use this information in the classroom.

Materials

For each student:

- Are You Getting Your Money's Worth?
 Copy of the text
- Activity 1 & 2 Worksheets
 - Comparisons at the Grocery Store
 - Shopping at the Grocery Store

Introduction

Students are provided information enabling them to value compare and make informed consumer choices in buying merchandise in the marketplace. In addition, mathematical calculations are provided for computation practice.

As you use the attached lessons, it is important for students to realize they make many purchasing decisions each day; cosmetics, clothes, music, or food and drink. All these "daily necessities" have one ingredient in common: oversight is provided by Weights and Measures Officials to ensure that every transaction is accurate.

Review the materials and revise them to meet the needs of your students.

You may choose to customize the lessons to include newspaper ads. Consider comparing prices from specific products and by equating quantity, weight, measure and count, decide on which product to purchase. Statistics and colorful graphs are available from a variety of sources. See the resource listings in the back of this unit for specific information. It may be interesting for your students to visit business locations that sell both bulk and packaged products.

Procedure

- 1. Review the materials and revise them to meet the needs of your students.
- Introduce your students to the lesson by having them think about the prices their family pays for specific food items and how they determine which items to purchase. Possible discussion and/or writing prompts are listed below.
 - If you were to ask your parents how they determine the best value for their money while shopping at the grocery store, what would they say?
 - On the average, which is the better value, items prepackaged or purchased from the deli? Explain.
 - How would you determine the better buy?
 - After reading the lesson, conduct a classroom discussion. What was the most important thing they learned?

ARE YOU GETTING YOUR MONEY'S WORTH?

INTRODUCTION

Have you considered the number of purchasing decisions you make each day? Whether it is cosmetics, clothes, music, or food and drink, when purchasing these "daily necessities" you want to be sure you are getting what you pay for. The price for many items is determined, among other things, by the quantity you ask for and receive. It is the responsibility of the California Weights and Measures Officials to make sure you get what you pay for.



Every county in California has weights and measures officials whose job is to make sure that when you buy an item you are charged the correct price, the quantity is correct, and for some products, the quality is what you expect. The counties work with the State Division of Measurement Standards to enforce weights and measures laws and regulations.

DETERMINING QUANTITY – SEALED WITH A WHAT?

There are many types of equipment designed to measure commodities and determine quantity. You are probably familiar with scales in the supermarket and gas pumps at the gas station. There are also truck scales, livestock scales, taxi, parking, electric meters, and many others. They must comply with strict regulations that ensure they are accurate, compute correctly, and cannot be easily used to cheat. Weights and Measures Officials test them using very accurate **standards**.

If they comply with all the specifications and requirements, the official places a round sticker called a "seal" on the devices to indicate they are correct and can be used to buy or sell commodities. This is your guarantee the scale or gas pump is correct.



DOES THAT "AD" ADD UP?

In California, you must be charged the lowest advertised price for the items you buy. This can be an advertisement in a newspaper or flyer, a sign in the store, or the price on the item. You cannot be charged a higher price for using a credit card, but you can be offered a discount for using cash. Advertisements usually attract your attention by stating something like; "4 for \$2", "buy one get one free", "25% off", "or \$5 off". Pay special attention to any qualifying statements. In the first example "4 for \$2", the price is 50 cents for one item or \$1.50 for three. If the advertisement is qualified, for example, "single item 75¢", expect to pay \$1.50 for two items or \$2.25 for three. There are many variations of these forms of sales. Statements such as "value priced", "save", and "special value" are used to attract your attention and should be ignored because it is impossible to determine what they actually mean in relationship to the price of the item.

Weights and Measures Officials regularly visit stores posing as customers and purchase items to see if the seller is charging the correct prices. If you do not get the lowest price or the discount you are entitled to, the seller commits a violation of the law.

LABELS - YOUR SOURCE FOR INFORMATION

The label on a packaged item provides information you can use in your purchasing decisions. All packaged items must identify the product and packer and have a quantity statement telling you the net amount inside. **Net quantity** is the amount of product you are buying, less the amount of packaging which is called **tare**. Dividing the price of the package by the stated quantity gives a value called **unit price**. This value allows you to compare packages of different sizes. **Standard weight packages**, those where the quantity in each is the same, such as cereal boxes, are rarely displayed with a **unit price**, and you will have to determine it yourself. **Random weight packages**, those where weights of the same product vary between packages, such as those in the meat case of a supermarket are marked and sold by a unit price, the price per pound.





THE PRICE IS RIGHT

You are entitled to a written receipt any time you make a purchase. Apart from being proof of purchase, a receipt can show if you have been charged correctly. Something that has become increasingly common is the use of savings or club cards, particularly in supermarkets and some gas stations. These offer discounts over non-member prices, with the discount being taken at the register. Technology has allowed far more information to be shown on receipts today than just a few years ago. Because of this and the many methods used to apply a discount, all receipts do not present information in the same way. You will need to carefully scrutinize your receipts to ensure you were not overcharged.

PROTECT YOURSELF - WHAT YOU CAN DO TO ENSURE YOU GET WHAT YOU PAY FOR

Since Weights and Measures Officials cannot be at every transaction, you can protect yourself when making purchases by being informed, knowing what to expect and what to look for.

Use the following tips to make sure you get what you pay for.

- All devices should start on zero. The exception is a scale where a
 deduction for the "tare" is taken. The indication will be behind zero to
 allow for the weight of tare, which is the weight of the container and
 wrappings.
- Check that items weighed in front of you either have no wrapping or container or the scale makes allowance for it (tare is taken).
- When buying gasoline, look at the pump reading as it returns to zero and before the start of the delivery. If the reading moves before you start pumping gasoline, ask for the pump to be reset, otherwise you will be paying for something you did not get.
- Watch the prices charged at the register and bring any discrepancies to the attention of the clerk.
- Check your receipts for price accuracy, especially sale items.
- If you feel you have been overcharged, tell the clerk or store manager about it.
- Problems with your car's performance after buying fuel could indicate "bad" or contaminated fuel.
- If you find any of these problems, report them to your local county weights and measures office.

Comparisons at the Grocery Store

Name:	
Date:	

Dear Parent/Guardian:

As part of this lesson on "Getting Your Money's Worth", your child will need to spend some time at the grocery store. Please include your child in one of your store shopping trips so he/she can complete the assignment below by the following date:

________. No purchases are required.

Thank you!

- 1. Go grocery shopping with a parent this week or make a special trip to the grocery store for this assignment.
- 2. Choose a section of the store where items are available in various sizes and brands perhaps including the store brand (for example the cereal aisle).
- 3. From the information on the package and the advertised price, complete the following chart for each item.

	Α	В	С	D
	Item	Weight	Price	Price Per Ounce
1				
2				
3				
4				
5				
6				

Comparisons at the Grocery Store

4.	How did you decide which items to pick for this exercise.
5.	How did you determine the price per ounce in Column D?
6.	What was the better value of the items purchased?
7.	Do you think this will always be true? Explain your answer.
8.	In one well written paragraph, explain what you learned from this exercise.

Shopping at the Grocery Store

Name:	 	
Date:		

Dear Parent/Guardian:

As part of this lesson on "Getting Your Money's Worth", your child will need to spend some time at the grocery store. Please include your child in one of your store shopping trips so he/she can complete the assignment below by the following date:

Thank you!

- 1. Go grocery shopping with a parent this week or make a special trip to the grocery store for this assignment.
- 2. Go to the deli department where meats or cheeses are weighed on a scale. Ask for 8 ounces of cheese or meat. If the deli sells coleslaw, potato or macaroni salad ask for 8 ounces of one of these.
- 3. Watch as the items are weighed.
- 4. Go to the appropriate section of the store and pick up pre-packed items similar to those you bought in the deli. Try to find items with the same weights as the deli items.
- 5. Complete the following chart:

Α	В	С	D	E
Item	Deli or Pre-packed?	Weight	Price Paid	Price Per Ounce

Shopping at the Grocery Store

6.	Did the scale show zero with nothing on the scale? Give reasons why it may not.
7.	Could you see the scale indications clearly?
8.	How did you determine the price per ounce in Column D?
9.	What was the better value of the items purchased, prepacked or from the deli?
10.	Do you think this will always be true? Explain your answer.
11.	Did the scale have a weights and measures seal on it? What does this seal tell you?
12.	In one well written paragraph, explain what you learned from this exercise.

GLOSSARY

Device Equipment designed to weigh or measure commodities for sale.

Net Quantity Quantity of a packaged product without the packaging.

Random Weight Pack Packages of the same commodity with varying net weights.

Seal A sticker indicating a device was tested by a weights and

measures official and found to be correct.

Standard Weight Packages

Packages of the same commodity with the same weight.

Standards Those units of measure that government agrees to compare

all others to. Weights and measures is the keeper of those

standards.

Tare Weight of the container, wrapper or other material of a

packaged product.

Unit Pricing Price of a commodity expressed as a value per stated unit of

measure (e.g., cents/ounce, \$/pound, \$/kilogram).

Teacher's Resources and References

Training Module One, *Introduction to Weights and Measures*, California State Division of Measurement Standards. http://www.cdfa.ca.gov/dms/

Training Module Thirteen, *Quantity Control*, California State Division of Measurement Standards. http://www.cdfa.ca.gov/dms/

California Foundation for Agriculture in the Classroom, http://www.cfaitc.org/

Michigan Department of Agriculture, Weights and Measures in the Classroom, http://www.michigan.gov/mda/0,1607,7-125-1566_1733-8902--,00.html

Ohio Department of Agriculture, Agriculture in the Classroom, http://www.point-and-click.com/aitc/

USDA's Agriculture in the Classroom, http://www.agclassroom.org/index.htm